

IN THE CLAIMS

1 (Previously Presented). A method comprising:
blending a photodefinable polybenzoxazole precursor with zirconia particles
having a particle size of less than 100 nanometers.

Claims 2 and 3 (Canceled).

4 (Previously Presented). The method of claim 1 including blending the
photodefinable precursor with zirconia particles having a particle size less than 20 nanometers.

5 (Previously Presented). The method of claim 1 including blending the
photodefinable precursor with zirconia particles having a particle size of about 13 nanometers.

6 (Previously Presented). The method of claim 1 including curing the precursor after
blending with zirconia particles.

7 (Previously Presented). The method of claim 1 including blending the precursor
with a filler so that zirconia particles constitute from about 9 to about 20 percent by weight.

8 (Previously Presented). The method of claim 1 including forming a polymer from
said blended precursor and zirconia particles.

9 (Previously Presented). A photodefinable polymer for semiconductor applications
comprising:

a photodefinable polybenzoxazole precursor; and
zirconia particles having a particle size of less than 100 nanometers.

Claims 10 and 11 (Canceled).

12 (Previously Presented). The polymer of claim 9 wherein said zirconia particles have a particle size of less than 20 nanometers.

13 (Previously Presented). The polymer of claim 9 wherein said zirconia particles have a particle size of about 13 nanometers.

14 (Previously Presented). The polymer of claim 9 wherein said zirconia particles comprise from about 9 to about 20 percent by weight.

15 (Previously Presented). A photodefinable polymer for semiconductor applications comprising:

a photodefinable polybenzoxazole precursor; and
zirconia particles comprising about 9 to about 20 percent of the system, said particles having a particle size of less than 20 nanometers.

Claims 16 and 17 (Canceled).

18 (Previously Presented). The polymer of claim 15 wherein said zirconia particles have a particle size of approximately 13 nanometers.

19 (Previously Presented). A polymer precursor for semiconductor applications comprising:

a photodefinable polybenzoxazole precursor; and
zirconia particles having a particle size of less than 100 nanometers.

Claims 20 and 21 (Canceled).

22 (Previously Presented). The precursor of claim 19 wherein said zirconia particles have a particle size of less than 20 nanometers.

23 (Previously Presented). The precursor of claim 19 wherein said zirconia particles have a particle size of about 13 nanometers.

24 (Previously Presented). The precursor of claim 19 wherein said zirconia particles comprise about 9 to about 20 percent by weight.

25 (Previously Presented). An integrated circuit comprising:
a substrate; and
a photodefinable polymer formed on said substrate, said polymer including a photodefinable resin and zirconia particles having a particle size of less than 100 nanometers.

Claims 26 and 27 (Canceled).

28 (Previously Presented). The circuit of claim 25 wherein said zirconia particles have a particle size of less than 20 nanometers.

29 (Previously Presented). The circuit of claim 25 wherein said zirconia particles have a particle size of about 13 nanometers.

30 (Previously Presented). The circuit of claim 25 wherein said zirconia particles comprise from about 9 to about 20 percent by weight.